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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/041,006A

DATE: 09/05/2002 TIME: 08:37:59

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\09052002\J041006A.raw

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3 <110> APPLICANT: Andrade-Gordon, Patricia
              Darrow, Andrew
              Qi, Jian-shen
      7 <120> TITLE OF INVENTION: DNA encoding the novel human serine
              protease T
     10 <130> FILE REFERENCE: ORT-1032
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/041,006A
C--> 13 <141> CURRENT FILING DATE: 2002-01-07
     15 <160> NUMBER OF SEQ ID NOS: 11
     17 <170> SOFTWARE: PatentIn Ver. 2.0
     19 <210> SEQ ID NO: 1
     20 <211> LENGTH: 1110
    21 <212> TYPE: DNA
    22 <213> ORGANISM: Homo sapiens
    24 <400> SEQUENCE: 1
    25 gaccaeggee etgegeecea geeaggeetg aggacatgag geggeeggeg geggtgeege 60
    26 teetgetget getgtgtttt gggteteaga gggeeaagge ageaacagee tgtggtegee 120
    27 ccaggatgct gaaccgaatg gtgggcgggc aggacacgca ggagggcgag tggccctggc 180
    28 aagtcagcat ccagcgcaac ggaagccact tctgcggggg cagcctcatc gcggagcagt 240
    29 gggtcctgac ggctgcgcac tgcttccgca acacctctga gacgtccctg taccaggtcc 300
    30 tgctgggggc aaggcagcta gtgcagccgg gaccacacgc tatgtatgcc cgggtgaggc 360
    31 aggtggagag caacccctg taccagggca cggcctccag cgctgacgtg gccctggtgg 420
    32 agetggagge accagtgeee tteaccaatt acateeteee egtgtgeetg eetgaeeeet 480
    33 cggtgatett tgagaeggge atgaaetget gggteaetgg etggggeage eecagtgagg 540
    34 aagaceteet geeegaaceg eggateetge agaaactege tgtgeeeate ategacacae 600
    35 ccaagtgcaa cctgctctac agcaaagaca ccgagtttgg ctaccaaccc aaaaccatca 660
    36 agaatgacat gctgtgcgcc ggcttcgagg agggcaagaa ggatgcctgc aagggcgact 720
    37 cgggcggccc cctggtgtgc ctcgtgggtc agtcgtggct gcaggcgggg gtgatcagct 780
    38 ggggtgaggg ctgtgcccgc cagaaccgcc caggtgtcta catccgtgtc accgcccacc 840
    39 acaactggat ccatcggatc atccccaaac tgcagttcca gccagcgagg ttgggcggcc 900
    40 agaagtgaga cccccggggc caggagcccc ttgagcagag ctctgcaccc agcctgcccg 960
    41 occacaccat cotgotggto otoccagogo tgotgttgca cotgtgagoo coaccagact 1020
    42 catttgtaaa tagcgctcct teeteecete teaaataeee ttattttatt tatgtttete 1080
    43 ccaataaaaa cccagcctgt gtgccagctg
    45 <210> SEQ ID NO: 2
    46 <211> LENGTH: 20
    47 <212> TYPE: DNA
    48 <213> ORGANISM: Artificial Sequence
    50 <220> FEATURE:
    51 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
    53 <400> SEQUENCE: 2
    54 gccaggcctg aggacatgag
                                                                          20
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56 <210> SEQ ID NO: 3

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57 <211> LENGTH: 20
 58 <212> TYPE: DNA
 59 <213> ORGANISM: Artificial Sequence
 61 <220> FEATURE:
 62 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
64 <400> SEQUENCE: 3
65 tgcgctggat gctgacttgc
                                                                       20
67 <210> SEQ ID NO: 4
68 <211> LENGTH: 40
69 <212> TYPE: DNA
70 <213> ORGANISM: Artificial Sequence
72 <220> FEATURE:
73 <223> OTHER INFORMATION: Description of Artificial Sequence: Nested probe
75 <400> SEQUENCE: 4
76 ccaggatgct gaaccgaatg gtgggcgggc aggacacgca
                                                                       40
78 <210> SEQ ID NO: 5
79 <211> LENGTH: 30
80 <212> TYPE: DNA
81 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
86 <400> SEQUENCE: 5
87 aggatctaga ggagggcgag tggccctggc
                                                                       30
89 <210> SEQ ID NO: 6
90 <211> LENGTH: 30
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
97 <400> SEQUENCE: 6
98 ggggtctaga cttctggccg cccaacctcg
                                                                      30
100 <210> SEQ ID NO: 7
101 <211> LENGTH: 290
102 <212> TYPE: PRT
103 <213> ORGANISM: Homo sapiens
105 <400> SEQUENCE: 7
106 Met Arg Arg Pro Ala Ala Val Pro Leu Leu Leu Leu Cys Phe Gly
                      5
109 Ser Gln Arg Ala Lys Ala Ala Thr Ala Cys Gly Arg Pro Arg Met Leu
110
112 Asn Arg Met Val Gly Gly Gln Asp Thr Gln Glu Gly Glu Trp Pro Trp
             35
                                 40
115 Gln Val Ser Ile Gln Arg Asn Gly Ser His Phe Cys Gly Gly Ser Leu
118 Ile Ala Glu Gln Trp Val Leu Thr Ala Ala His Cys Phe Arg Asn Thr
                         70
121 Ser Glu Thr Ser Leu Tyr Gln Val Leu Leu Gly Ala Arg Gln Leu Val
                     85
124 Gln Pro Gly Pro His Ala Met Tyr Ala Arg Val Arg Gln Val Glu Ser
```

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125
                                     105
 127 Asn Pro Leu Tyr Gln Gly Thr Ala Ser Ser Ala Asp Val Ala Leu Val
128
             115
                                 120
130 Glu Leu Glu Ala Pro Val Pro Phe Thr Asn Tyr Ile Leu Pro Val Cys
                             135
                                                 140
133 Leu Pro Asp Pro Ser Val Ile Phe Glu Thr Gly Met Asn Cys Trp Val
                         150
                                             155
136 Thr Gly Trp Gly Ser Pro Ser Glu Glu Asp Leu Leu Pro Glu Pro Arg
137
                     165
                                         170
139 Ile Leu Gln Lys Leu Ala Val Pro Ile Ile Asp Thr Pro Lys Cys Asn
140
                180
                                     185
142 Leu Leu Tyr Ser Lys Asp Thr Glu Phe Gly Tyr Gln Pro Lys Thr Ile
                                 200
145 Lys Asn Asp Met Leu Cys Ala Gly Phe Glu Glu Gly Lys Lys Asp Ala
        210
                             215
148 Cys Lys Gly Asp Ser Gly Gly Pro Leu Val Cys Leu Val Gly Gln Ser
149 225
                        230
                                             235
151 Trp Leu Gln Ala Gly Val Ile Ser Trp Gly Glu Gly Cys Ala Arg Gln
152
                    245
                                         250
                                                             255
154 Asn Arg Pro Gly Val Tyr Ile Arg Val Thr Ala His His Asn Trp Ile
155
                                     265
157 His Arg Ile Ile Pro Lys Leu Gln Phe Gln Pro Ala Arg Leu Gly Gly
158
            275
                                 280
160 Gln Lys
161
        290
164 <210> SEQ ID NO: 8
165 <211> LENGTH: 1130
166 <212> TYPE: DNA
167 <213> ORGANISM: Artificial Sequence
169 <220> FEATURE:
170 <223> OTHER INFORMATION: Description of Artificial Sequence: Fusion gene of
          Protease T in a zymogen activation vector
173 <400> SEQUENCE: 8
174 gaattcacca ccatggacag caaaggttcg tcgcagaaat cccgcctgct cctgctgctg 60
175 gtggtgtcaa atctactctt gtgccagggt gtggtctccg actacaagga cgacgacgac 120
176 gtggacgcgg ccgctcttgc tgcccccttt gatgatgatg acaagatcgt tgggggctat 180
177 gctctagagg agggcgagtg gccctggcaa gtcagcatcc agcgcaacgg aagccacttc 240
178 tgcgggggca gcctcatcgc ggagcagtgg gtcctgacgg ctgcgcactg cttccgcaac 300
179 acctetgaga egteeetgta eeaggteetg etgggggeaa ggeagetagt geageeggga 360
180 ccacacgcta tgtatgcccg ggtgaggcag gtggagagca accccctgta ccagggcacg 420
181 gcctccagcg ctgacgtggc cctggtggag ctggaggcac cagtgccctt caccaattac 480
182 atcctccccg tgtgcctgcc tgacccctcg gtgatctttg agacgggcat gaactgctgg 540
183 gtcactggct ggggcagccc cagtgaggaa gacctcctgc ccgaaccgcg gatcctgcag 600
184 aaactcgctg tgcccatcat cgacacaccc aagtgcaacc tgctctacag caaagacacc 660
185 gagtttggct accaacccaa aaccatcaag aatgacatgc tgtgcgccgg cttcgaggag 720
186 ggcaagaagg atgcctgcaa gggcgactcg ggcggccccc tggtgtgcct cgtgggtcag 780
187 tcgtggctgc aggcgggggt gatcagctgg ggtgagggct gtgcccgcca gaaccgccca 840
188 ggtgtctaca tccgtgtcac cgcccaccac aactggatcc atcggatcat ccccaaactg 900
189 cagttccage cagegaggtt gggeggecag aagtetagae ateaceatea eeateactag 960
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190 cggccgcttc cctttagtga gggttaatgc ttcgagcaga catgataaga tacattgatg 1020
191 agtttggaca aaccacaact agaatgcagt gaaaaaaatg ctttatttgt gaaatttgtg 1080
192 atgctattgc tttatttgta accattataa gctgcaataa acaagttgac
194 <210> SEQ ID NO: 9
195 <211> LENGTH: 315
196 <212> TYPE: PRT
197 <213> ORGANISM: Artificial Sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: Description of Artificial Sequence: Fusion Protein
          of Protease T in a zymogen activation construct
203 <400> SEQUENCE: 9
204 Met Asp Ser Lys Gly Ser Ser Gln Lys Ser Arg Leu Leu Leu Leu
205
      1
207 Val Val Ser Asn Leu Leu Cys Gln Gly Val Val Ser Asp Tyr Lys
                                      25
210 Asp Asp Asp Asp Val Asp Ala Ala Ala Leu Ala Ala Pro Phe Asp Asp
211
                                  40
213 Asp Asp Lys Ile Val Gly Gly Tyr Ala Leu Glu Glu Gly Glu Trp Pro
         50
                             55
216 Trp Gln Val Ser Ile Gln Arg Asn Gly Ser His Phe Cys Gly Gly Ser
217 65
                         70
                                              75
219 Leu Ile Ala Glu Gln Trp Val Leu Thr Ala Ala His Cys Phe Arg Asn
                     85
                                          90
222 Thr Ser Glu Thr Ser Leu Tyr Gln Val Leu Leu Gly Ala Arg Gln Leu
223
                                     105
225 Val Gln Pro Gly Pro His Ala Met Tyr Ala Arg Val Arg Gln Val Glu
226
            115
                                120
                                                     125
228 Ser Asn Pro Leu Tyr Gln Gly Thr Ala Ser Ser Ala Asp Val Ala Leu
229
                            135
                                                 140
231 Val Glu Leu Glu Ala Pro Val Pro Phe Thr Asn Tyr Ile Leu Pro Val
                        150
                                             155
234 Cys Leu Pro Asp Pro Ser Val Ile Phe Glu Thr Gly Met Asn Cys Trp
                    165
                                        170
                                                             175
237 Val Thr Gly Trp Gly Ser Pro Ser Glu Glu Asp Leu Leu Pro Glu Pro
238
                180
                                    185
240 Arg Ile Leu Gln Lys Leu Ala Val Pro Ile Ile Asp Thr Pro Lys Cys
241
            195
                                200
243 Asn Leu Leu Tyr Ser Lys Asp Thr Glu Phe Gly Tyr Gln Pro Lys Thr
                            215
                                                220
246 Ile Lys Asn Asp Met Leu Cys Ala Gly Phe Glu Glu Gly Lys Lys Asp
249 Ala Cys Lys Gly Asp Ser Gly Gly Pro Leu Val Cys Leu Val Gly Gln
250
                    245
                                        250
252 Ser Trp Leu Gln Ala Gly Val Ile Ser Trp Gly Glu Gly Cys Ala Arg
253
                260
                                    265
255 Gln Asn Arg Pro Gly Val Tyr Ile Arg Val Thr Ala His His Asn Trp
                                280
258 Ile His Arg Ile Ile Pro Lys Leu Gln Phe Gln Pro Ala Arg Leu Gly
                            295
```

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- 261 Gly Gln Lys Ser Arg His His His His His
- 262 305 310 364 6210× GEO TR NO. 10
- 264 <210> SEQ ID NO: 10
- 265 <211> LENGTH: 4

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- 266 <212> TYPE: PRT
- 267 <213> ORGANISM: Artificial Sequence
- 269 <220> FEATURE:
- 270 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide substrate
- 272 <400> SEQUENCE: 10
- 273 Ala Ala Pro Phe
- 275 <210> SEQ ID NO: 11
- 276 <211> LENGTH: 4
- 277 <212> TYPE: PRT
- 278 <213> ORGANISM: Artificial Sequence
- 280 <220> FEATURE:
- 281 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide substrate
- 283 <400> SEQUENCE: 11
- 284 Ala Ala Pro Val

VERIFICATION SUMMARY DATE: 09/05/2002 PATENT APPLICATION: US/10/041,006A TIME: 08:38:00

Input Set : A:\Sequence Listing.txt Output Set: N:\CRF3\09052002\J041006A.raw

 $\ \, \text{L:} 12 \ \, \text{M:} 270 \ \, \text{C:} \ \, \text{Current Application Number differs, Replaced Current Application Number L:} 13 \ \, \text{M:} 271 \ \, \text{C:} \ \, \text{Current Filing Date differs, Replaced Current Filing Date}$